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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,428	10/16/2003	Shungiong Yue	200313759-1	2225

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EXAMINER

SHAH, MANISH S

ART UNIT PAPER NUMBER

2853

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/688,428

Applicant(s)

YUE ET AL.

Examiner

Manish S. Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claims 7, 9 & 11 are objected to because of the following informalities: In all three claims applicant has typographic error. With respect to claim 7, line: 1 it suppose to be **claim 6**, not claim6. With respect to claim 9, line: 1 it suppose to be **claim 8**, not claim8. With respect to claim 11, line: 1 it suppose to be **claim 10**, not claim10.  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being obvious over Looman (# US 5679143).

Looman discloses a marking fluid used in inkjet printer including a buffering agent having a first functional group and second functional group with pKa equal to or less than that of the pH sensitive colorant (column: 5, line: 35-60). They also disclose that the buffering agent is amino acid (column: 6, line: 47-55). They also disclose that the marking material (Yellow ink) is approximately pH 4 (see Examples) and buffering

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agent selected from beta-alanine, 4-aminobutyric acid, 6-aminocaproic acid, L-aspartic acid (column: 7, line: 4-20). They also disclose that the marking fluid is a dye-based ink or pigment based ink (column: 7, line: 39-45).

Looman differs from the claim of the present invention is that the first functional group with a pKa at most 1.0 unit away and second functional group with a pKa at least 2.0 unit away.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate the first with pKa at most 1.0 unit away and second functional group with pKa at least 2.0 unit away, since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233 (CCPA1955).

3. Claims 10-27 are rejected under 35 U.S.C. 103(a) as being obvious over Looman (# US 5679143).

Looman discloses a inkjet recording system including inkjet recording head (see Examples; column: 10, line: 35-50), which consist of a fixing fluid, which includes a buffering agent having a first functional group and second functional group with pKa equal to or less than that of the pH sensitive colorant (column: 5, line: 5-20). They also disclose that the buffering agent is amino acid (column: 6, line: 47-55). They also disclose that the marking material (Yellow ink) is approximately pH 4 (see Examples) and buffering agent selected from beta-alanine, 4-aminobutyric acid, 6-aminocaproic

acid, L-aspartic acid (column: 7, line: 4-20). They also disclose that the marking fluid is a dye-based ink or pigment based ink (column: 7, line: 39-45).

Looman differs from the claim of the present invention is that the first functional group with a pKa at most 1.0 unit away and second functional group with a pKa at least 2.0 unit away.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate the first with pKa at most 1.0 unit away and second functional group with pKa at least 2.0 unit away, since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233 (CCPA1955).

4. Claims 1-3, 6-9 are rejected under 35 U.S.C. 103(a) as being obvious over Adamic et al. (# US 5785743).

Adamic et al. discloses a marking fluid used in inkjet printer including a buffering agent having a first functional group and second functional group with pKa equal to or less than that of the pH sensitive colorant (column: 5, line: 5-20). They also disclose that the marking material (Yellow ink) is approximately pH 4 (see Examples). They also disclose that the marking fluid is a dye-based ink or pigment based ink (column: 5, line: 29-50).

Adamic et al. differs from the claim of the present invention is that the first functional group with a pKa at most 1.0 unit away and second functional group with a pKa at least 2.0 unit away.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate the first with pKa at most 1.0 unit away and second functional group with pKa at least 2.0 unit away, since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233 (CCPA1955).

5. Claims 10-12, 15-21 & 24-27 are rejected under 35 U.S.C. 103(a) as being obvious over Adamic et al. (# US 5785743).

Adamic et al. discloses a inkjet recording system including inkjet recording head (column: 8, line: 15-33), which consist of a fixing fluid, which includes a buffering agent having a first functional group and second functional group with pKa equal to or less than that of the pH sensitive colorant (column: 5, line: 5-20). They also disclose that the marking material (Yellow ink) is approximately pH 4 (see Examples). They also disclose that the marking fluid is a dye-based ink or pigment based ink (column: 5, line: 29-50).

Adamic et al. differs from the claim of the present invention is that (1) the first functional group with a pKa at most 1.0 unit away and second functional group with a pKa at least 2.0 unit away. (2) Method of preventing partitioning into plastic and adhesive by fixing fluid in an inkjet print head.

Adamic et al. didn't discloses the method of preventing partitioning into plastic and adhesive by fixing fluid in an inkjet print head. However the invention is about the fixing fluid, the preamble (method of preventing partitioning into plastic and adhesive by

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fixing fluid) doesn't limit the claim of the invention. So the Adamic et al. reference reads on the claim limitation.

It would have been obvious to one having ordinary skill in the art at the time of invention was made to incorporate the first with pKa at most 1.0 unit away and second functional group with pKa at least 2.0 unit away, since it has been held that it is not inventive to discovering and optimum value or workable ranges by routine experimentation. *In re Aller*, 105 USPQ 233 (CCPA1955).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Manish S. Shah  
Primary Examiner  
Art Unit 2853

MSS

3/6/06